

ABSTRACT

Various regulatory domains promulgate standards to define how wireless devices should operate in certain frequency bands. The 5 GHz spectrum is of particular importance to certain regulatory domains because of radar systems also operating in this spectrum. To avoid interference with such radar systems, wireless devices operating in this spectrum should be able to detect radar and quickly vacate any channels currently used by the radar systems. In a channel switching technique, if the new channel is radar-exempt, then normal operation commences on the new channel. If the new channel is non-radar-exempt, then normal operation commences on a temporary radar-exempt channel and an aggregate background scan can be performed on the new channel. If no radars are detected using the aggregate background scan, then operation is switched from the temporary radar-exempt channel to the new channel. This channel switching technique minimizes disruption to users during a radar event.